**EU – South Korea Joint Call**

**EUK1 – 2016: 5G – Next Generation Communication Networks**

October 7, 2015

NCP Training

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**EU-RoK Cooperation**

**Net Futures**

**5G Strategic Partnership:**

*Joint declarations of cooperation*

- Joint Declaration on ICT and 5G signed on 16 June 2014, by former VP Kroes and former Minister Choi of South Korea

Precursor towards establishment of similar cooperation agreements with other countries / 5G flagship initiatives
Two main aspects

- Joint / coordinated research activities in 5G, Internet of Things and cloud computing
- 5G policy issues such as spectrum management and standardisation

Tightly related aspects

- Coherent path towards research exploitation through global standards and spectrum allocations
- Consistent global industrial links through mirror MoU signed by 5G Industrial Association and 5G Forum.

EU-Korea – ICT R&I
1st Coordinated ICT Call

Topics:

- 5G–Next Generation Communication Networks
  \textbf{Target:} 5G architectural interoperability framework
- Internet of Things Joint Research
  \textbf{Target:} Interop and standards across IoT architectural models
- Federated Cloud resource brokerage for mobile cloud services
  \textbf{Target:} brokerage of cloud technologies across heterogeneous clouds.
EU-RoK Cooperation

Net Futures

Call features

Overall budget:
• 6 MEUR (3/1.5/1.5) from EU + 6 MEUR Korea

Implementation
A joint evaluation to select the proposals to be funded will be carried out in Brussels

Timeline (indicative):
• October 20, 2015: Call opens
• January 19, 2016: Deadline for proposals
• March 2016: Evaluation of proposals
• July 2016: New projects start

5G challenges

• Refining the vision, accounting for different services views (e.g. DTT)
• From Vision to Architecture
• Standards, time frame and priority services
• Bringing verticals inside
• Frequency bands, WRC 2015/19
• Socio economics
• Testing and pilot deployments

⇒ Taking International development into account
Scope:

- Technology demonstration that address and demonstrates feasibility of an integrated architectural approach towards heterogeneous accesses (with emphasis on mmWave access including RF/Antenna, Relay, Base stations and Terminals),
- high capacity/resilient backhaul,
- an evolved packet core implemented through NFV/SDN based core functions,
- high precision/integrity positioning techniques for advanced location based services/timing and satellite communication and navigation technologies where appropriate.

Most challenging 5G characteristics should be targeted for the technology demonstration, to efficiently provide ubiquitous 5G services.

Prototype installations and proof of concept are expected to be implemented and demonstrated in the context of the 2018 Olympic Games of Pyungchang.

Expected Impact:

1. Contribution to the definition of a 5G interoperability architectural framework
2. Contribution to the identification of key interfaces to standardise
3. Contribution to the integration framework towards access and core
4. Support to related standardisation activities (e.g. 3G PP)
Further information

H2020 WP2016-17:
https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/05i.%20LEI
t-ICT_2016-2017_pre-publication.pdf

Call - EU-South Korea Joint Call (page 121 -127)
Horizon 2020
http://ec.europa.eu/programmes/horizon2020/

Participants Portal

5G-PPP
https://5g-ppp.eu/

Coordinated Call Conditions

Submission and evaluation follow the principles of Horizon 2020 calls with certain specific conditions:

- **Common PartB** (technical annex)
  - PMs for each partner/per task is required
- **EU and South Korean proposals submitted to the respective coordinated calls**
  - European consortium signs contract with the EC
  - South Korean consortium signs contract with their funding agencies MSIP or IITP
- **Each proposal should include a coordination agreement**
  - Signed before starting the project
  - Does not replace the Consortium Agreement (which is still required from all EU projects)
- **EU-JP research plan: balanced effort, genuine cooperation**
- **Duration:** 2 years max.
- **Max. funding (EU): 3M€** per RIA project (in EUK1)

(*) read carefully pages 125-127 of WP2016-17